

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1459 Alexandria, Vugania 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/450,890	11/29/1999	DAVID N. MAKINSON	SCH-52	8294
22827	7590 06/16/2003			
DORITY & I	MANNING, P.A.		EXAMI	NER
POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			NGUYEN	VINH P
			ART UNIT	PAPER NUMBER
			2829	
		DATE MAIL ED. 06/16/2002		

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application No.	Applicant(s)	
· v		09/450,890	MAKINSON ET AL.	
·	Office Action Summary	Examiner	Art Unit	
		VINH P NGUYEN	2829	
Period fo	The MAILING DATE of this communication r Reply	on appears on the cover	sheet with the correspondence address	
THE I - Externance - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR F MAILING DATE OF THIS COMMUNICAT isions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, by eply received by the Office later than three months after the digital patent term adjustment. See 37 CFR 1.704(b).	ION. FR 1.136(a). In no event, however, ion. In a reply within the statutory mining period will apply and will expire Setatute, cause the application to	er, may a reply be timely filed num of thirty (30) days will be considered timely. X (6) MONTHS from the mailing date of this communications are communicated as the communication of the communicat	cation,
1)⊠	Responsive to communication(s) filed or	n <u>07 April 2003</u> .		
2a) <u></u> □	This action is FINAL . 2b)	This action is non-fin	al.	
3)□ Dispositi	Since this application is in condition for a closed in accordance with the practice until			rits is
4) 🛛	Claim(s) 1-79 is/are pending in the applie	cation.		
	4a) Of the above claim(s) is/are wi	thdrawn from considera	tion.	
5) Claim(s) is/are allowed.				
6)⊠	6)⊠ Claim(s) <u>1-79</u> is/are rejected.			
7) 🗌	Claim(s) is/are objected to.			
8)[Claim(s) are subject to restriction a	and/or election requiren	ent.	
Applicati	on Papers			
9) 🗌 -	The specification is objected to by the Exa	ıminer.		
10) 🔲 -	Γhe drawing(s) filed on is/are: a)□	accepted or b)☐ objecte	to by the Examiner.	
	Applicant may not request that any objection	n to the drawing(s) be held	in abeyance. See 37 CFR 1.85(a).	
11) 🔲 -	The proposed drawing correction filed on	is: a) 🗌 approved	b) disapproved by the Examiner.	
_	If approved, corrected drawings are required		on.	
12) 🗌 -	The oath or declaration is objected to by the	ne Examiner.		
Priority u	nder 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim for fo	oreign priority under 35	U.S.C. § 119(a)-(d) or (f).	
a)[☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority docu	ments have been recei	ved.	
	2. Certified copies of the priority docu	ments have been recei	ved in Application No	
* 5	3. Copies of the certified copies of the application from the Internation ee the attached detailed Office action for	al Bureau (PCT Rule 17	′.2(a)).	•
	cknowledgment is made of a claim for do	·		cation)
a	The translation of the foreign language of a claim for do language. The translation of the foreign language. The claim for do language of a claim for do language. The claim for do language of a claim for do language. The claim for do language of a claim for do language. The claim for do language of a claim for do language. The claim for do language of a claim for do la	je provisional applicatio	n has been received.	
Attachment	-			
1) Notice 2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449) Paper N	l8) 5) <u> </u>	nterview Summary (PTO-413) Paper No(s) Notice of Informal Patent Application (PTO-152) Other:	
J.S. Patent and Tr PTO-326 (Re		fice Action Summary	Part of Paper No. 21	

Application/Control Number:	Page 2
09/450,890	2.
Art Unit: 2829	

1. Claims 1-79 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It appears that the specification does not have support for the resilient connectors (154,156,158) connected to the spades (74,76,78 and 80). It is also unclear from the drawings how these resilient connectors are connected to the spades since the connectors are located on one of the surface of the base plate. Therefore, the operation of the apparatus is not well understood.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Germer et al (Pat # 5,001,420).

As to claim 16, Germer et al disclose a utility meter as shown in figures 1 and 3 having an enclosure with a cover (156) and a base plate (14), a metrology board (110) electrically

Application/Control Number:	Page 3
09/450,890	_
Art Unit: 2829	

connected to the spades (16,18,22), a circuit board (58) electrically connected to the metrology board (68) for providing additional functionality beyond the functionality provided by the metrology board selected customized feature for the meter beyond the metrology board electricity consumption signal. (see column 2, lines 31-41 and column 7, lines 59-68- column 8, lines 1-25)

As to claim 17, it appears that the circuit board and the metrology board is electrically connected to each other through a fixed connector (96) so that the circuit board (70) is able to collect data from the metrology board in order to analyze the energy consumption.

4. Claim 65 is rejected under 35 U.S.C. 102(b) as being anticipated by Loy et al (Pat # 5,966,010).

As to claim 65, Loy et al disclose a meter as shown in figure 1 having a metrology board (20), an encloseable casing (12) having a cover (26), a baseplate (12) with spades (not shown) for electrical contact of the meter with main power and an antenna (22) connected to the metrology board (20). It is noted that the antenna is associated directly with a selected of the first and second opposing surfaces (half circumference) of the metrology board.

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number:	Page 4
09/450,890	3
Art Unit: 2829	

6. Claims 34-36,38-41,66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Germer et al (pat #5,001,420) in view of Loy et al (Pat # 5,966,010) and Johnson (Pat #4,298,839) and Edward et al (Pat # 4,792,677)

As to claims 34,38-39,66-67, Germer et al disclose a utility meter as shown in figures 1 and 3 having an enclosure with a cover (156) and a base plate (14), a metrology board (110) electrically connected to the spades (16,18,22), a circuit board (58) electrically connected to the metrology board (110) for providing additional functionality beyond the functionality provided by the metrology board selected customized feature for the meter beyond the metrology board electricity consumption signal. (see column 2, lines 31-41 and column 7, lines 59-68- column 8, lines 1-25) and a fixed connector (96) for connecting both the metrology board (110) and the circuit board (58). It is noted that the board of Germer et al does not have an antenna. Loy et al disclose a meter as shown in figure 1 having a metrology board (20), an encloseable casing (12) having a cover (26) and a baseplate (12) and an antenna (22) connected to the metrology board (20). It would have been obvious for one of ordinary skill in the art to provide an antenna to the metrology board so that the measured signal is transmitted to a remote location.

As to claim 35, it is well known that there is a power supply for providing power to those Boards so that they would have power for performing their functions.

-	
Application/Control Number:	Page 5
09/450,890	
Art Unit: 2829	

As to claims 36 and 41, Germer et al teach that the metrology board connected to the circuit board through a fixed connector (96).

As to claims 37 and 40, Johnson disclose a meter as shown in figures 1 and 2 having a light source (86,87), a light pipe (115,117) for transmitting the light from the light source to the outside, an encloseable casing (12) having a cover and a baseplate. It would have been obvious for one of ordinary skill in the art to provide light source and light pipe on the chassis to the device of Germer et al (pat # 4,804,957) in view of Loy et al so that optical readout is obtained.

As to claim 68, Edward et al also teach that it would have been well known in the meter to have a display (20) supported within a cover and at least a transparent outer cover (18) for protecting the enclosed component.

7. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Germer et al (pat # 5,001,420).

As to claim 18, it would have been obvious for one of ordinary skill in the art to provide a snap fit mount for the circuit board since this is an alternative way to mount a circuit board within the enclosure.

As to claim 19, it appears that both of the circuit boards inherently receive supply power from a common power supply so that these board would be able to function.

Application/Control Number:	Page 6
09/450,890	
Art Unit: 2829	

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of resilient connectors electrically connecting between the basics metrology board and the spades as recited in claims 1,25,42,53, and 69 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

VINH P. NGUYEN PRIMARY EXAMINER ART UNIT 2829

06/10/03